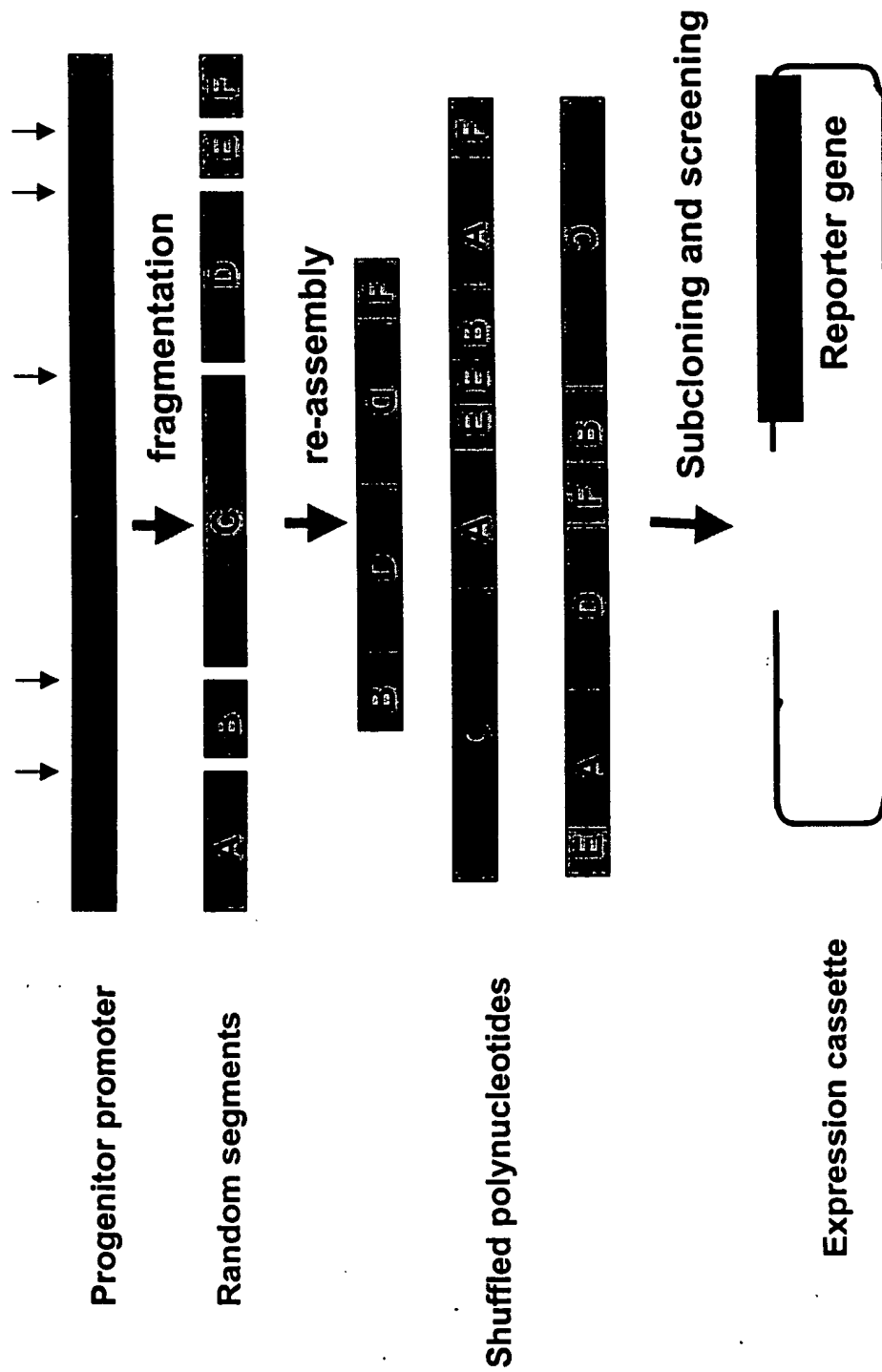


FIGURE 1



BEST AVAILABLE COPY

FIGURE 2

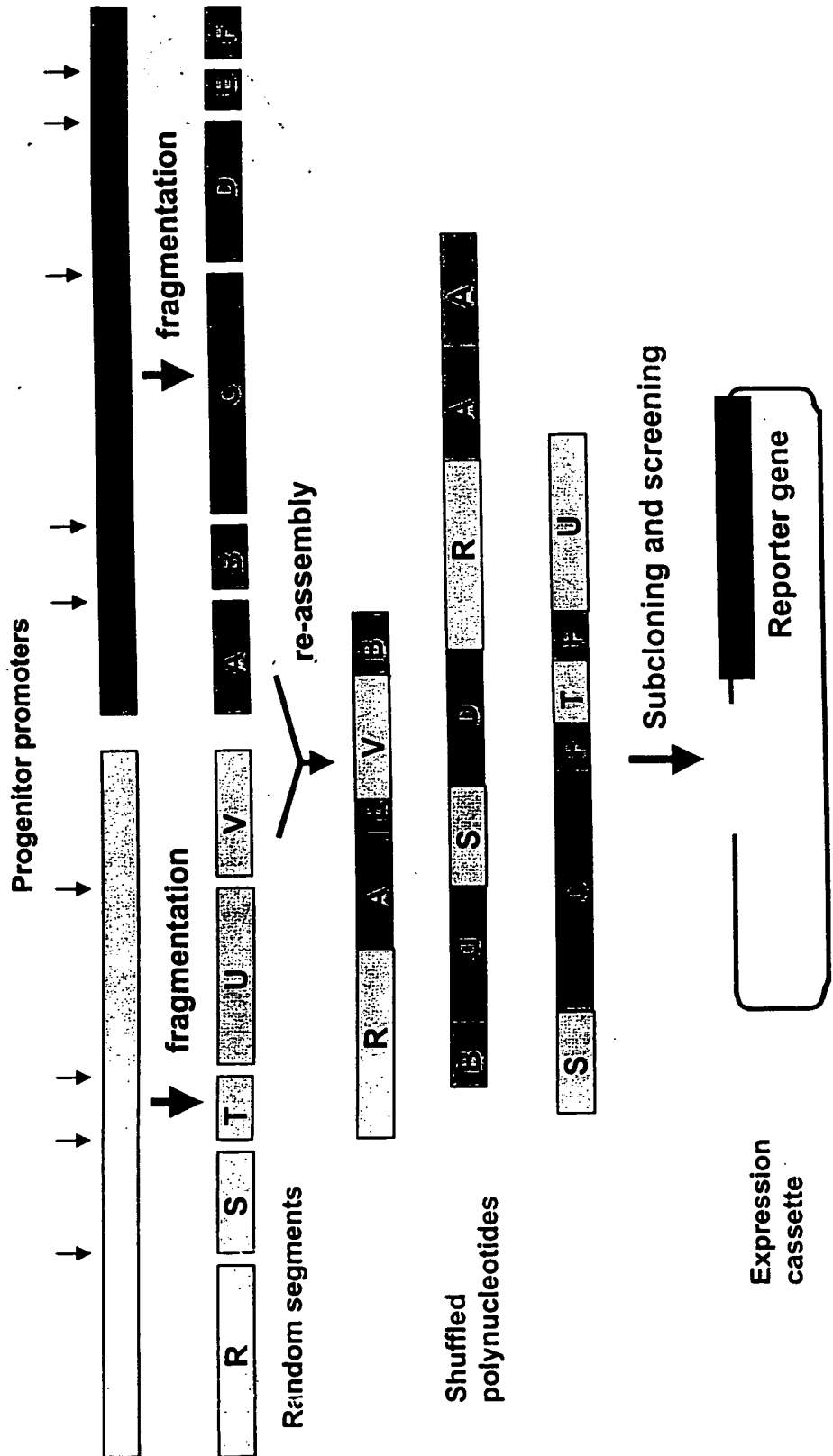


FIGURE 3

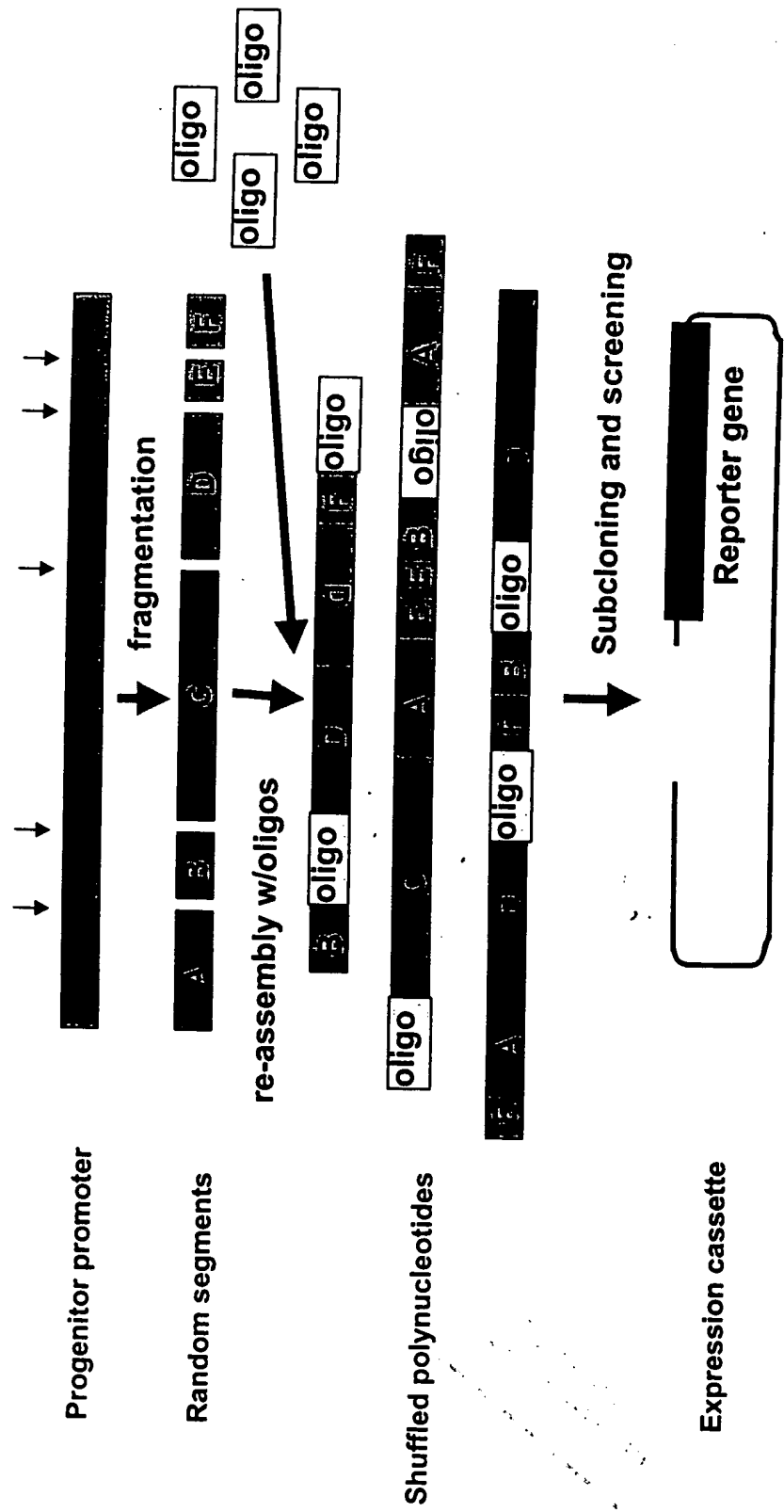
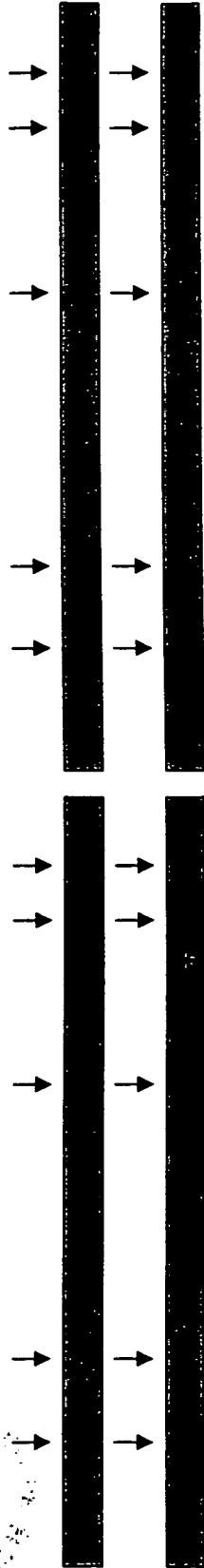


FIGURE 4

Progenitor promoters



fragmentation



* = point mutation
(ex. mutagenic PCR)

Random segments

re-assembly



Shuffled
polynucleotides



Subcloning and screening



Expression
cassette